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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,200	06/23/2003	Kenji Tsukada	Q76217	6413
23373	7590	04/14/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			TRAN, LY T	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,200

Applicant(s)

TSUKADA, KENJI

Examiner

Ly T. TRAN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/17/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to because of the following informalities: in claim 1, there is no limitation recites that the controller starts the movement of the wiper, therefore, the controller can not stop the wiper since it never been start. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11,14,16,18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being obvious over Takemoto et al (USPN 6,371,595) in view of Ikeda (JP 05201012).

With respect to claims 1, 14,16, 18 and 20, Takemoto et al. disclose a liquid ejecting apparatus comprising:

- A liquid ejecting head (Column 6: line 12-13) having a plurality of nozzles for ejecting a liquid drop
- A wiping member (Column 7: line 1-3), wiping an opening portion of the nozzle

- A carriage mounted with the liquid head, and moving in a horizontal direction relative to the wiping member (Column 7: line 33-34)
- A controller, stops a movement of the wiping member relative to the carriage for a predetermined time period in a state that the wiping member is brought into press contact with the liquid head after wiping the liquid head (Column 8: line 1-14)
- the wiping member is moved relative to the carriage in a second horizontal direction substantially orthogonal to the horizontal direction after movement of the wiping member is stopped for a predetermined time period in a state that the wiping member is brought into press contact with the liquid head (Column 8: 1-14)
- the wiping member is comprised of an elastic member (Column 1: line 49-50) wherein the wiping member is moved in a direction substantially orthogonal to a direction in which the wiping member is bent after the predetermined time period is passed in the state that the wiping member is brought into press contact with the liquid head such that wiping member is released from the contact state (Column 8: line 14-23).

Takemoto fails to teach an inclined plat is mounted on the carriage and formed with an inclined face having a rising inclination as being far from the liquid ejecting head.

Ikeda teaches an inclined plat is mounted on the carriage and formed with an inclined face having a rising inclination as being far from the liquid ejecting head (Abstract, Fig. 7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an inclined surface as taught by Ikeda. The motivation of doing so is to restrain scattering of ink when the wiper cleans the recording head and preventing a record material from being stained.

3. Claims 13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Takmoto et al (USPN 6,371,595) in view of Ikeda (JP 05201012), further in view of Nakagawa et al (US 2004/0130588).

The combination of Takemoto and Ikeda fails to teach the wiping member has a rectangular shape in a horizontal section and wherein a longitudinal direction of the rectangular shape of the wiping member is substantially in orthogonal to the horizontal direction, the wiping face being inclined and the front end of the wiping member is tapered shaped.

Nakagawa teaches the wiping member has a rectangular shape in a horizontal section and wherein a longitudinal direction of the rectangular shape of the wiping member is substantially in orthogonal to the horizontal direction, the wiping face being inclined and the front end of the wiping member is tapered shaped (Fig.3, 5, 6, 7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the shape of wiper as taught by Nakagawa. The motivation

of doing so is to better control the wiping force through curvature change therefore prevent the wiper from hydroplaning over waste fluid to flow down.

4. Claim 11 and 22 are rejected under 35 U.S.C. 103(a) as being obvious over Takemoto et al (USPN 6,371,595) in view of Arakawa (USPN 6,679,578).

With respect to claims 11 and 22, Takemoto discloses:

- A liquid ejecting head (Column 6: line 12-13) having a plurality of nozzles for ejecting a liquid drop
- A wiping member (Column 7: line 1-3), wiping an opening portion of the nozzle
- A carriage mounted with the liquid head, and moving in a horizontal direction relative to the wiping member (Column 7: line 33-34)
- A controller, stops a movement of the wiping member relative to the carriage for a predetermined time period in a state that the wiping member is brought into press contact with the liquid head after wiping the liquid head (Column 8: line 1-14).

However, Takemoto fails to teach the inclined plate and the inclined plate and the liquid head are separated with a clearance space.

Arakawa teaches the inclined plate and the inclined plate (element 16) and the liquid head are separated with a clearance space (Fig.3, fig.6A).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the inclined plate and the head are separated with a

Art Unit: 2853

clearance space as taught by Arakawa. The motivation of doing so is to prevent the ink adhere to the wiper again.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

April 12, 2006


STEPHEN MEIER
SUPERVISORY PATENT EXAMINER